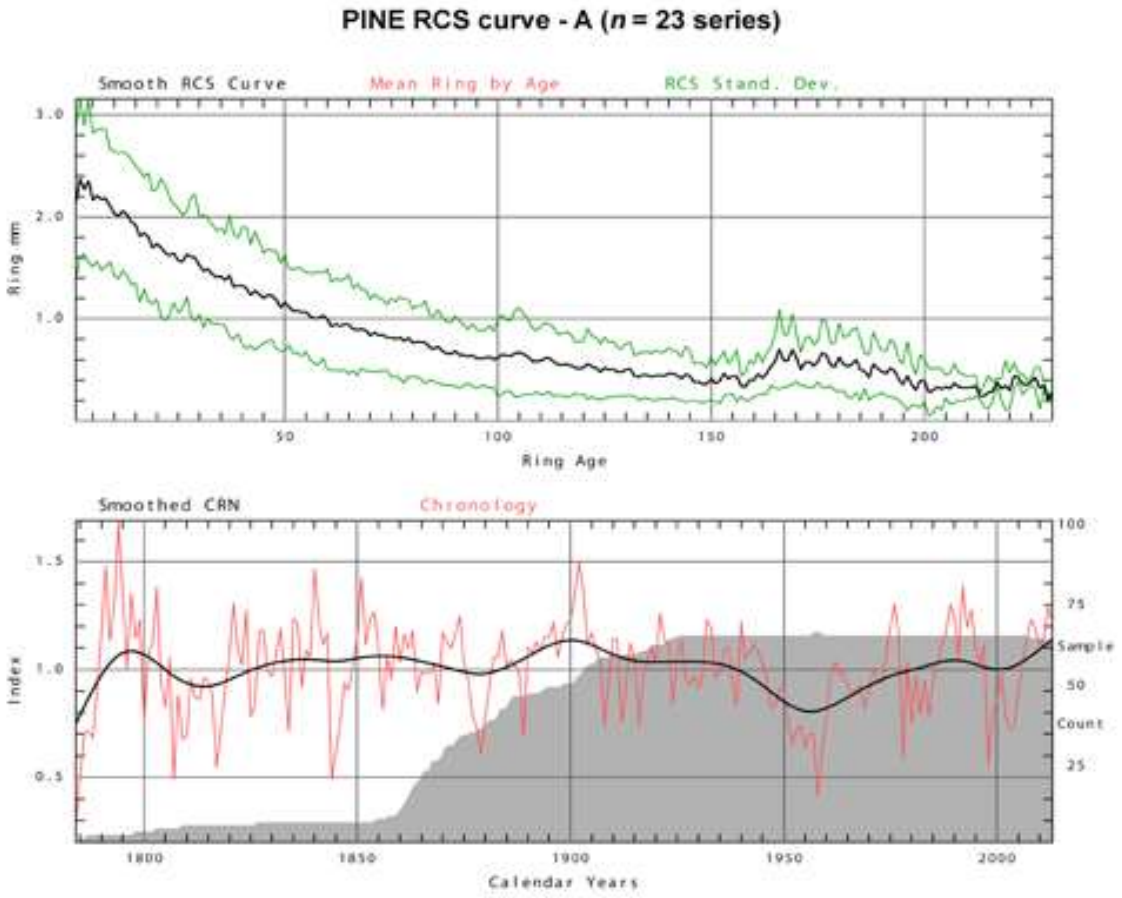
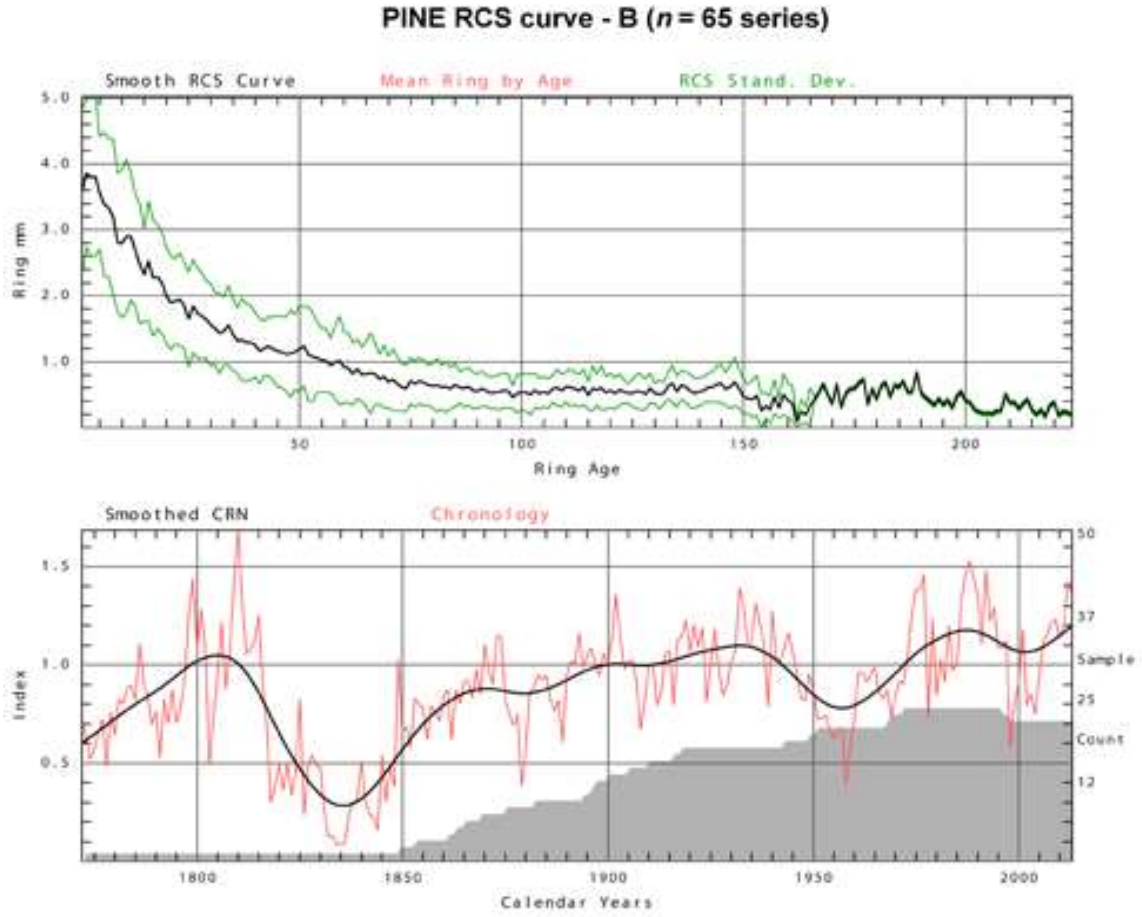
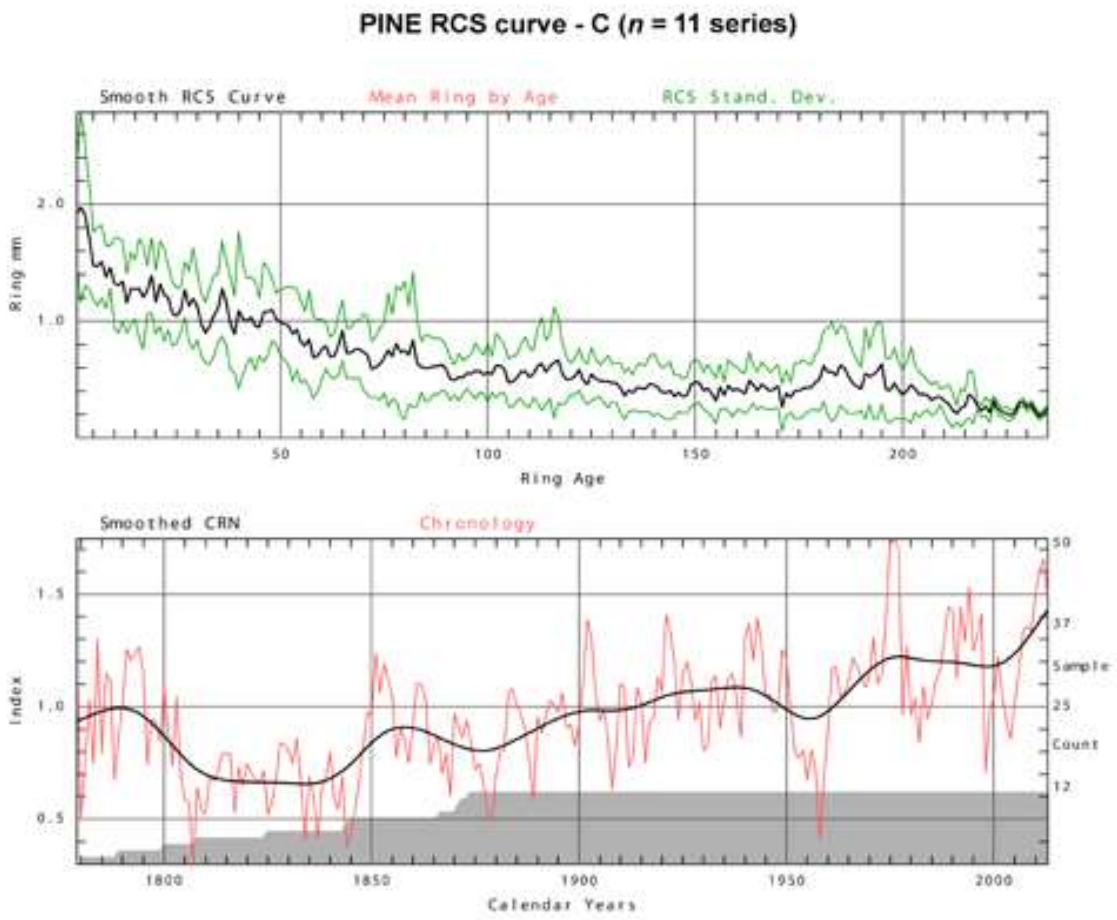
Supplementary Material – RCS curves

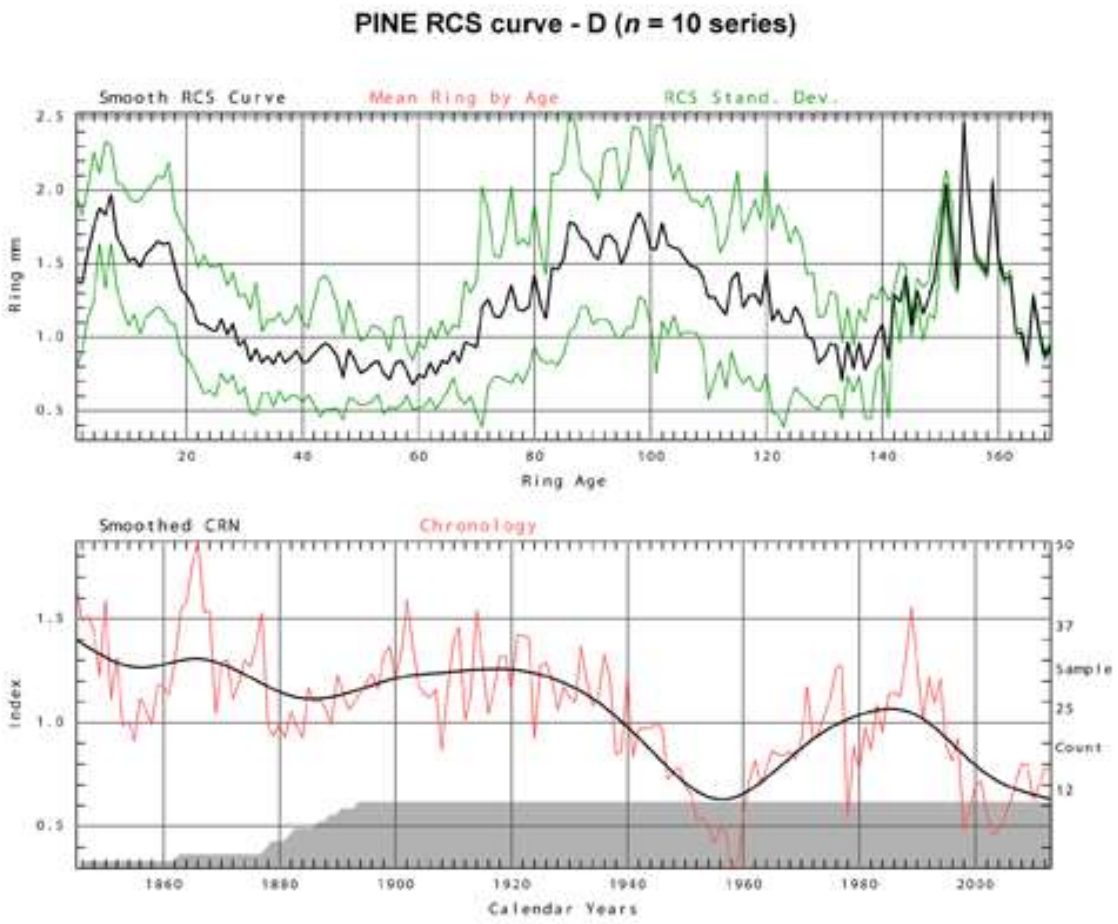
For:
Strong, W. L, 2020. A direct comparison of sympatric high-latitude *Pinus contorta* and *Picea albertiana* ring-width chronologies. Tree-Ring Research 76(1):1-10.

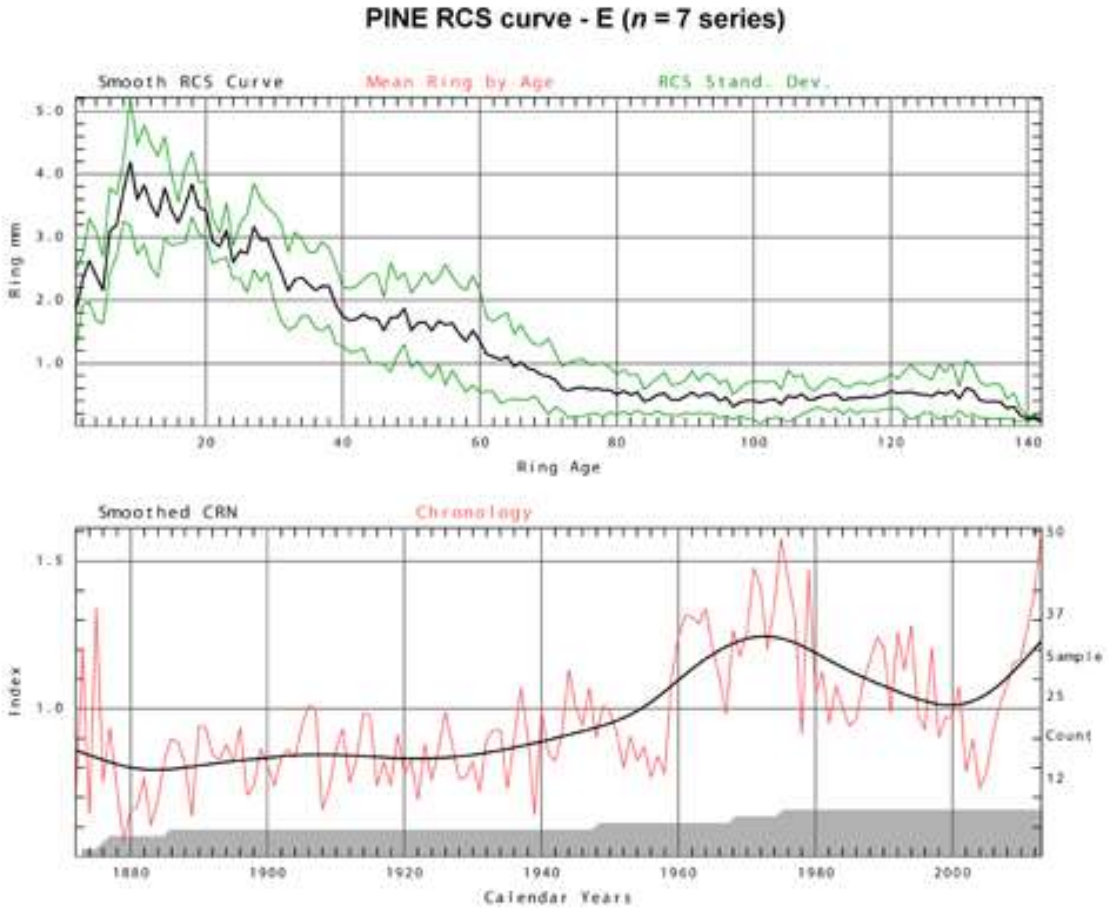
Lodgepole pine (n = 5) and western white spruce (n = 7) regional curve standardization (RCS) curve types (upper black lines) with standard deviations (green lines); and their associated average chronology values derived from measured ring-widths (red lines), smoothed chronology model (lower black lines), and sample sizes (shaded area). Diagrams generated by CRUST software.

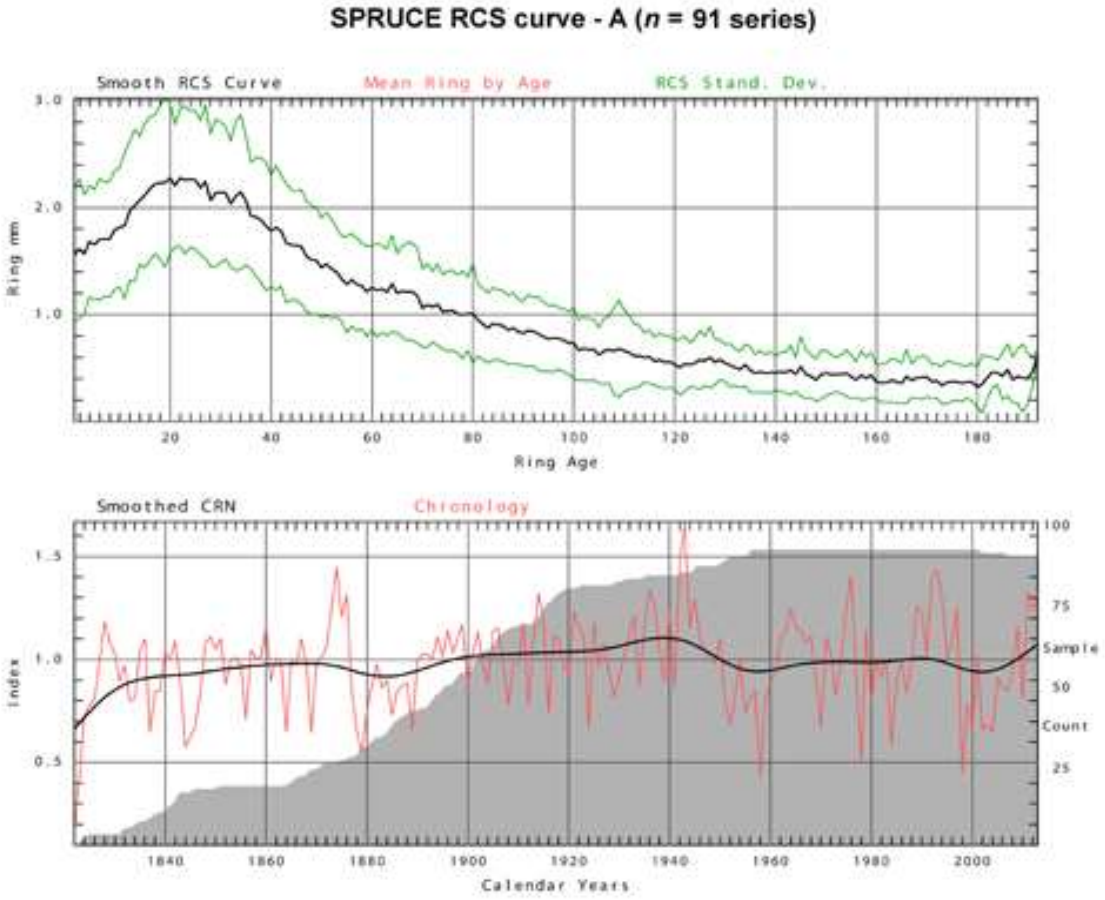



PINE RCS curve - B (n = 65 series)
Smooth RCS Curve
Mean Ring by Age
RCS Stand. Dev.
Ring mm
5.0
4.0
3.0
2.0
1.0
50
100
150
200
Ring Age
Smoothed CRN
Chronology
Index
1.5
1.0
0.5
1800
1850
1900
1950
2000
Calendar Years
50
37
25
12
Sample
Count

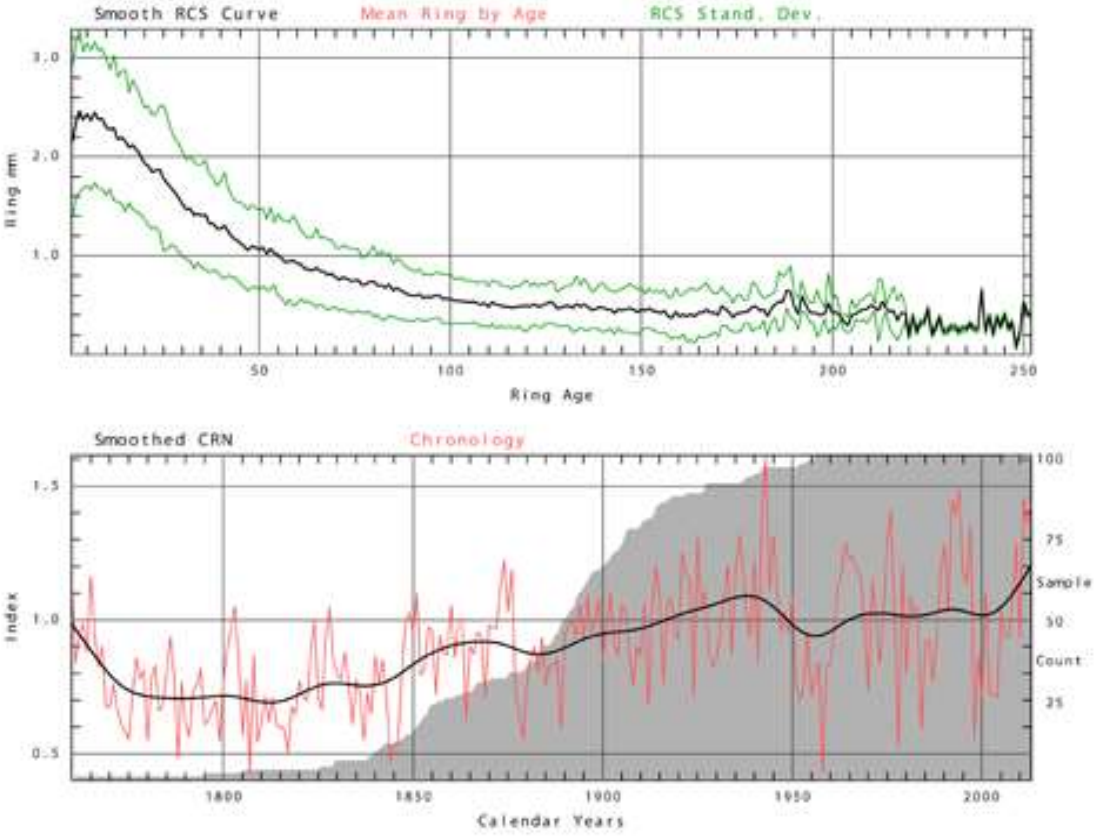

PINE RCS curve - C (n = 11 series)
Smooth RCS Curve
Mean Ring by Age
RCS Stand. Dev.
Ring mm
2.0
1.0
50
100
150
200
Ring Age
Smoothed CRN
Chronology
Index
1.5
1.0
0.5
1800
1850
1900
1950
2000
Calendar Years
50
37
25
12
Sample
Count

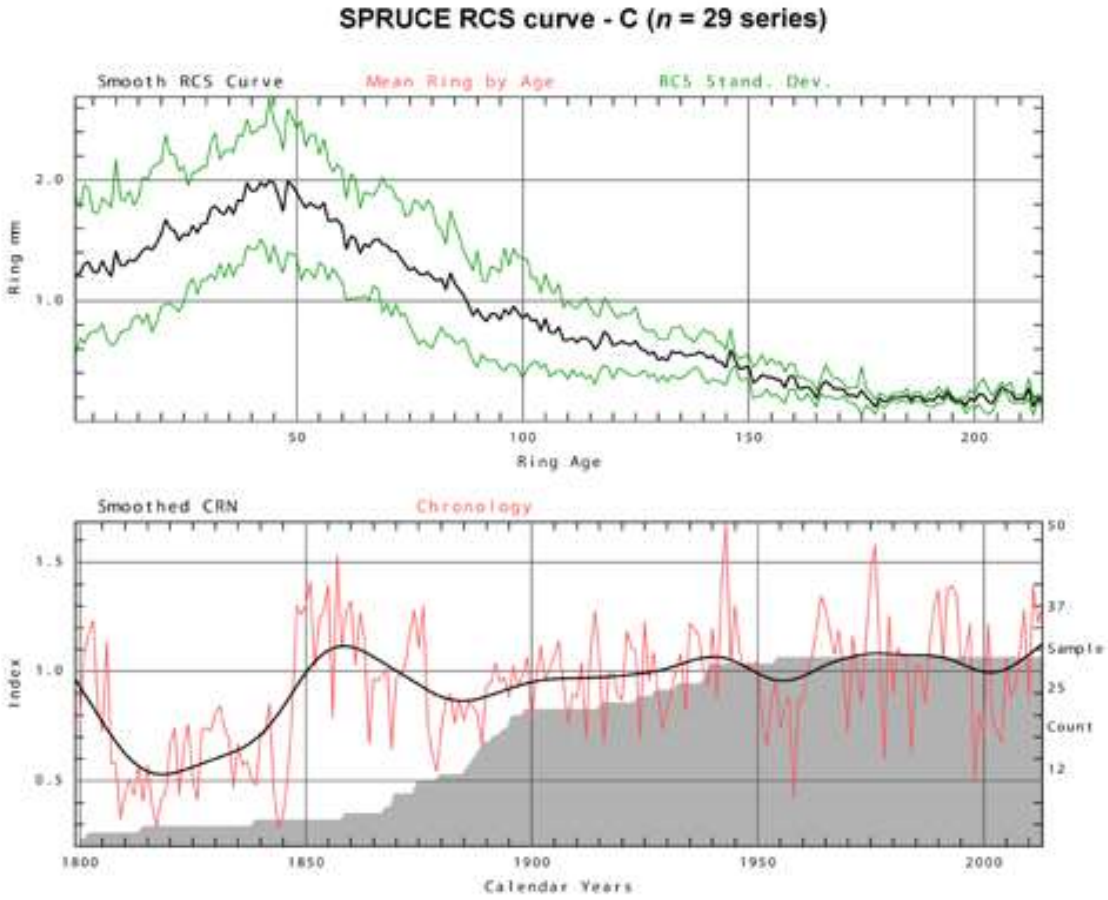

PINE RCS curve - D (n = 10 series)
Smooth RCS Curve
Mean Ring by Age
RCS Stand. Dev.
Ring mm
2.5
2.0
1.5
1.0
0.5
20
40
60
80
100
120
140
160
Ring Age
Smoothed CRN
Chronology
Index
1.5
1.0
0.5
50
37
25
12
Sample
Count
1860
1880
1900
1920
1940
1960
1980
2000
Calendar Years

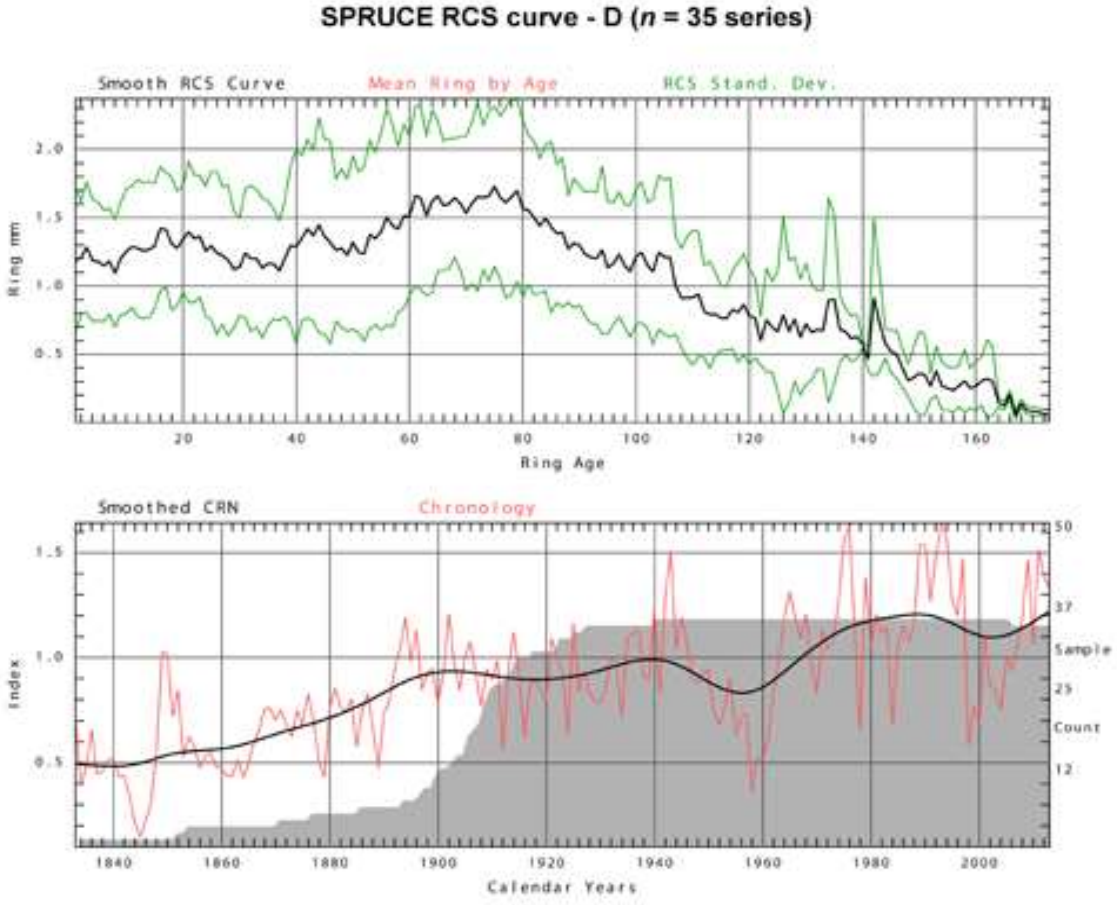

PINE RCS curve - E (n = 7 series)
Smooth RCS Curve
Mean Ring by Age
RCS Stand. Dev.
Ring mm
5.0
4.0
3.0
2.0
1.0
20
40
60
80
100
120
140
Ring Age
Smoothed CRN
Chronology
Index
1.5
1.0
50
37
25
12
Sample
Count
1880
1900
1920
1940
1960
1980
2000
Calendar Years

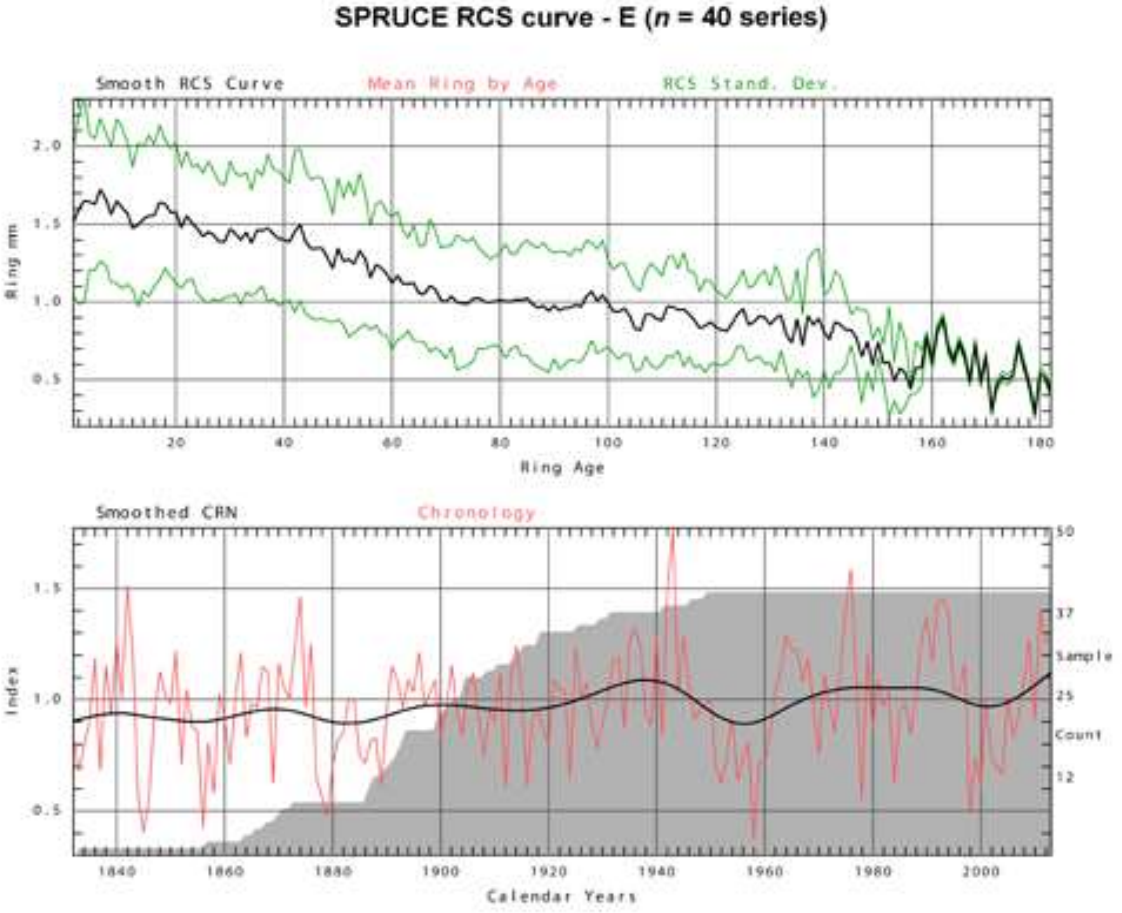

SPRUCE RCS curve - A (n = 91 series)
Smooth RCS Curve
Mean Ring by Age
RCS Stand. Dev.
Ring mm
3.0
2.0
1.0
20
40
60
80
100
120
140
160
180
Ring Age
Smoothed CRN
Chronology
Index
1.5
1.0
0.5
100
75
50
25
Sample
Count
1840
1860
1880
1900
1920
1940
1960
1980
2000
Calendar Years

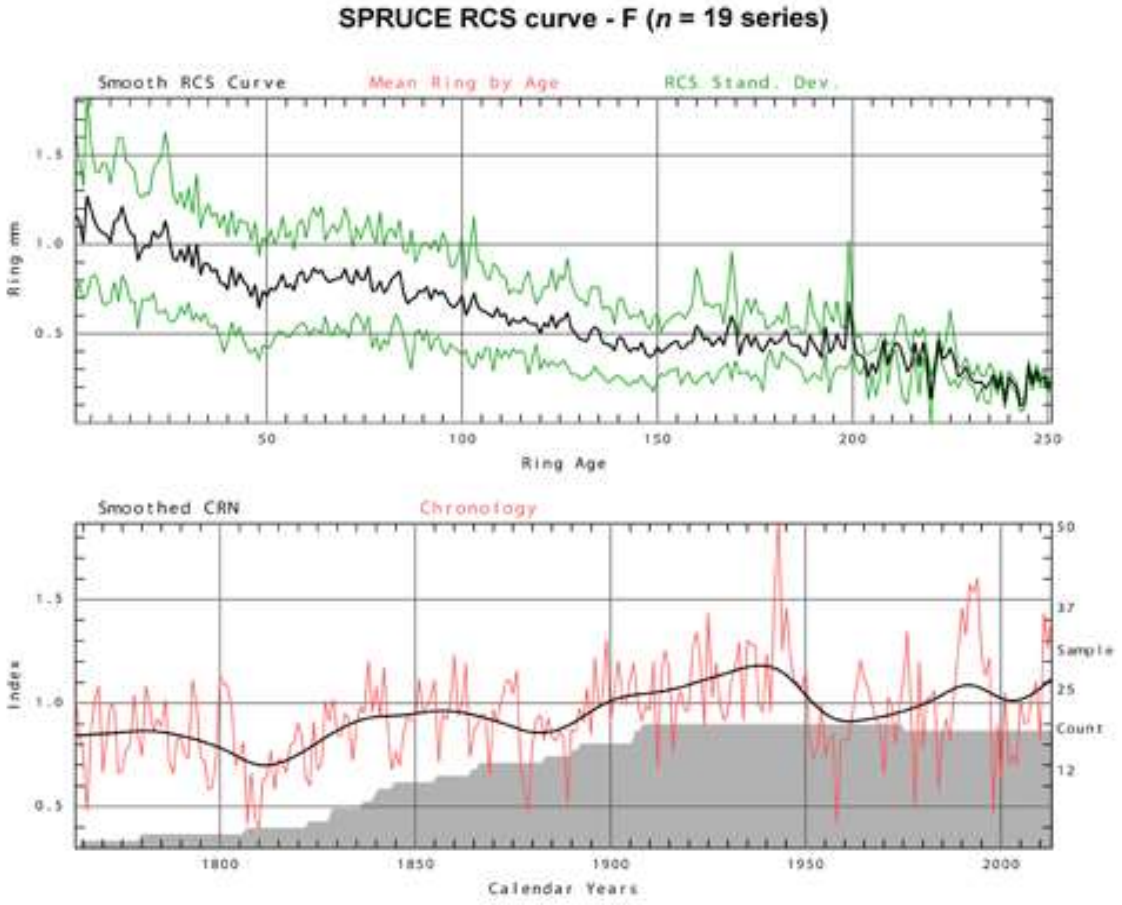
SPRUCE RCS curve - B (*n* = 100 series)

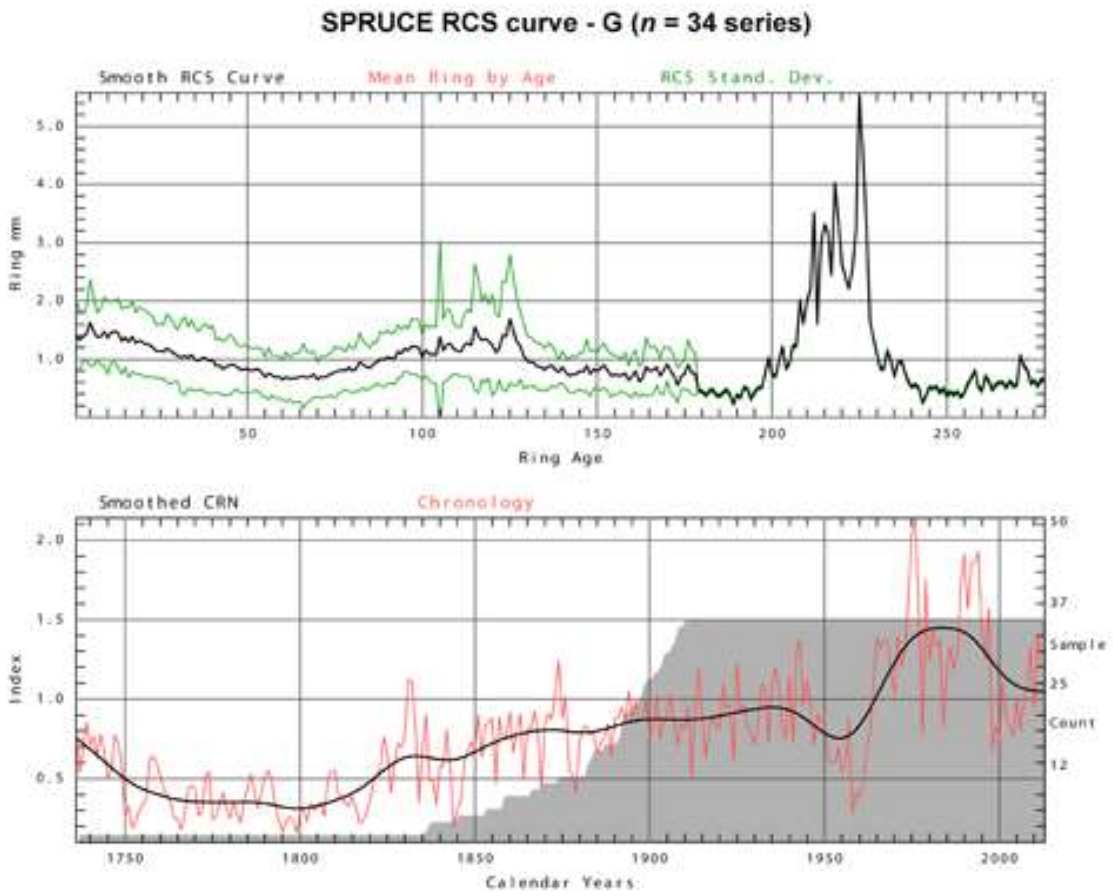



SPRUCE RCS curve - C (n = 29 series)
Smooth RCS Curve
Mean Ring by Age
RCS Stand. Dev.
Ring mm
2.0
1.0
50
100
150
200
Ring Age
Smoothed CRN
Chronology
Index
1.5
1.0
0.5
1800
1850
1900
1950
2000
Calendar Years
50
37
25
12
Sample
Count


SPRUCE RCS curve - D (n = 35 series)
Smooth RCS Curve
Mean Ring by Age
RCS Stand. Dev.
Ring mm
2.0
1.5
1.0
0.5
20
40
60
80
100
120
140
160
Ring Age
Smoothed CRN
Chronology
Index
1.5
1.0
0.5
50
37
25
12
Sample
Count
1840
1860
1880
1900
1920
1940
1960
1980
2000
Calendar Years


SPRUCE RCS curve - E (n = 40 series)
Smooth RCS Curve
Mean Ring by Age
RCS Stand. Dev.
Ring mm
2.0
1.5
1.0
0.5
20
40
60
80
100
120
140
160
180
Ring Age
Smoothed CRN
Chronology
Index
1.5
1.0
0.5
50
37
25
12
Sample
Count
1840
1860
1880
1900
1920
1940
1960
1980
2000
Calendar Years


SPRUCE RCS curve - F (n = 19 series)
Smooth RCS Curve
Mean Ring by Age
RCS Stand. Dev.
Ring mm
1.5
1.0
0.5
50
100
150
200
250
Ring Age
Smoothed CRN
Chronology
Index
1.5
1.0
0.5
1800
1850
1900
1950
2000
Calendar Years
50
37
25
12
Sample
Count


SPRUCE RCS curve - G (n = 34 series)
Smooth RCS Curve
Mean Ring by Age
RCS Stand. Dev.
Ring mm
5.0
4.0
3.0
2.0
1.0
50
100
150
200
250
Ring Age
Smoothed CRN
Chronology
Index
2.0
1.5
1.0
0.5
50
37
25
12
Sample
Count
1750
1800
1850
1900
1950
2000
Calendar Years